

IN THE CLAIMS AMEND

1. An optical system, in particular projection exposure system for microlithography, in particular having a slot-shaped image field or non-rotational-symmetric illumination,

- a) having an optical element comprising at least one chamber that is sealed from atmospheric pressure and is enclosed by boundary surfaces and that has a fluid filling, wherein at least one of the boundary surfaces is exposed at least partially by illumination light;
- b) having a fluid source that has a fluid connection to the chamber via a fluid supply line; and
- c) having a control device for the pressure of the fluid filling to adjust and maintain the image properties of the optical element;

wherein

the at least one enclosed chamber is configured in a non-rotationally symmetric way such that a change in the fluid pressure inside the at least one chamber results in a change in non-rotational-symmetric imaging properties of the optical element that have an n-fold symmetry relative to the optical axis of the optical element, where n is greater than 1.